Neutrino Subgroup Nu1 - Agenda for the SLAC workshop

Wednesday, March 6, 2013

Wednesday, March 6, 2013 – Session 1, 90min, 1.00-2.30pm
Introduction and Precision Measurements

1. Open questions and future directions in neutrino physics (theory) – *20min, M. Lindner or P. Huber*
2. Status quo and future evolution of theta13 (exp) – *20min, K. Luk*
3. Status quo and future evolution of theta23 and dm32 (exp) – *20min S. Woicicki*
4. Status quo and future evolution of theta12 and dm21 (exp) – *20min H. Robertson*

Discussion period – 10min

Wednesday, March 6, 2013 – Session 2, 90min, 3.00-4.30pm
Mass Hierarchy

1. From existing experiments and their upgrades –*15min, D. Cowen*
1. From atmospheric neutrinos in the future - *15min, E. Kearns*
2. From man-made neutrinos in the future - *15min, X. Qian*

Discussion period – 45min

Wednesday, March 6, 2013 – Session 3, 45min, 4.45-5.30pm
joint with Nu6 (Cosmos) and underground capabilities

1. Mass hierarchy from astrophysics (SN, Planck etc,) – *20min, A. Friedland*

Discussion period – 25 min

- What are the prospects of determining the mass hierarchy from astrophysics compared to terrestrial experiments by 2025?

- What are the underground facilities needs to achieve the science goals of the neutrino oscillation group Nu1?

Thursday, March 7, 2013

Thursday, March 7, 2013 – Session 1, 90min, 10.30-12.00
CP Violation and Proton Decay

1. CP violation measurements from future superbeam experiments – *20min, M. Dracos*
2. CP violation from advanced beams and neutrino factories, - *20min, A. Bross*
3. Large Water-Based Detectors – *20min, S. Kettell*

Discussion period – 30min

Thursday, March 7, 2013 – Session 2, 90min, 1.00-2.30
joint with Nu4 (Interactions) and Nu5 (anomalies)

1. Short-baseline experiments (microB,MiniBooNE, etc) - *20min, Jon's choice*
2. Flux xsection nuclear effects, scattering experimental systematics, – *20min, Morfin*
3. Neutrino scattering systematics and CP violation measurements - *20min, Coloma*
4. Need for a near detector, - *20min, P. Vahle*

Discussion period – 10min

Thursday, March 7, 2013 – Session 3, 90min, 3.00-4.3.0
joint with Nu5 (Anomalies), Nu7(neutrinos and society) and accelerator capabilities

Short baseline experiments

1. NuStorm - *15min, collaboration* (PH)
2. Short-baseline experiments with reactors - *15min, E. Blucher*

Neutrino Experiments and Safeguard Applications

1. Novel detectors and experiments at reactors – *15min, P. Barbeau*

Accelerators incl. Project X

1. What we need – *15min, Bob Tschirhart*
2. Evolution of facilities (aka staging) – *15min, K. Long*

Discussion period – 15min